

## PATENT ABSTRACTS OF JAPAN

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(21)Application number : 2002-134992	(71)Applicant : ISHIHARA CHEM CO LTD
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## (54) METHOD FOR PREVENTING TIN WHISKER OF FILM CARRIER OR THE LIKE

## (57)Abstract:

PROBLEM TO BE SOLVED: To prevent whisker effectively in a tin film formed on a fine pattern of a film carrier, or the like.

SOLUTION: In a film carrier or a printed circuit board where a fine pattern of copper or a copper alloy is covered with solder resist, an underlying film of single metal selected from a group of gold, silver, platinum, palladium, indium, bismuth and nickel is formed on the fine pattern by immersion plating, the underlying film and the fine pattern are heat treated, and then a tin film is formed on the underlying film by immersion plating thus preventing tin whisker. Since an intermetallic compound is not produced between tin on the surface and the basic copper due to presence of the underlying film, tin whisker of the film carrier, or the like, can be prevented effectively and since the underlying film and the fine pattern are heated, whisker preventive function is enhanced through removal of strain from the underlying layer and annealing of copper base.

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